

Automotive Related Product Packaging

DESCRIPTION

Cross-Reference To Related Applications

[Para 1] This application claims the benefit under 35 USC §119(e) of United States Provisional Patent 60/481,333 filed September 4, 2003, the entire disclosure of which is hereby incorporated by reference.

Background

[Para 2] The present invention relates to packaging for automotive-related products. Specifically, the invention relates to improved product packaging that provides for a stand alone display, provides for a reusable product storage device, and employs common themes across product lines.

[Para 3] Product packaging in general is important in the marketing of products as it represents the final opportunity for a company to provide information regarding the product and demonstrate the product's superiority to related or competitive products. In this regard, the product packaging must be sleek and compact, durable, capable of providing product information and cable of securing the product. Sometimes the product packing also provides features that protect the product from damage during transfer, display or storage. Most product packing is disposed of after purchase. Frequently consumers are then required to purchase separate product storage devices to store the product when not in use.

Summary of the Invention

[Para 4] The present invention relates to packaging for automotive-related products. Each of the packages provide for a stand alone display, a

reusable product storage device and employ common themes to provide a common look and functionality across the product line.

Description of the Drawings

[Para 5] In the accompanying drawings, which are incorporated in and constitute a part of this specification, embodiments of the invention are illustrated, which, together with a general description of the invention given above, and the detailed description given below serve to illustrate the principles of this invention.

[Para 6] Figure 1 illustrates a ten-count bungee cord packaging.

[Para 7] Figure 2 illustrates the packaging of Figure 1 including a set of bungee cords.

[Para 8] Figure 3 illustrate a fifteen-count bungee cord packaging.

[Para 9] Figure 4 illustrates the packaging of Figure 3 including a set of bungee cords.

[Para 10] Figure 5 illustrates a ten-count bungee cord packaging including a body comprised of opposing arcs.

[Para 11] Figure 6 is a top view of the packaging shown in Figure 5.

[Para 12] Figure 7 is an angled cross-sectional view of the packaging shown in Figure 5.

[Para 13] Figure 8 is a fifteen-count bungee cord packaging including a body comprised of opposing arcs.

[Para 14] Figure 9 is a top view of the packaging shown in Figure 8.

[Para 15] Figure 10 illustrates a single hitch ball packaging.

[Para 16] Figure 11 illustrates a hitch ball and lock packaging.

- [Para 17] Figure 12 illustrates a two hitch ball packaging.
- [Para 18] Figure 13 illustrates a three hitch ball packaging.
- [Para 19] Figure 14 illustrates a four cord ratchet strap packaging.
- [Para 20] Figure 15 illustrates a side view of the ratchet strap packaging shown in Figure 14.
- [Para 21] Figure 16 illustrates a back view of the ratchet strap packaging shown in Figure 14.
- [Para 22] Figure 17 illustrates a second embodiment of a four cord ratchet strap packaging.
- [Para 23] Figure 18 illustrates a side view of the ratchet strap packaging shown in Figure 17.
- [Para 24] Figure 19 illustrates a back view of the ratchet strap packaging shown in Figure 17.
- [Para 25] Figure 20 illustrates a packing for a single large ratchet strap.
- [Para 26] Figure 21 illustrates a two cord ratchet strap package with hinged portions in a closed position.
- [Para 27] Figure 22 illustrates the ratchet strap package of Figure 21 in the open position.
- [Para 28] Figure 23 illustrates a four cord ratchet strap package with hinged portions in a closed position.
- [Para 29] Figure 24 illustrates the ratchet strap package of Figure 23 in the open position.

Detailed Description

[Para 30] The present invention is directed to improved product packaging in general, and specifically to improved product packaging for automotive-related products. The improved automotive-related product packaging that provides for a stand alone display, provides for a reusable product storage device, and employs common themes across product lines. Although this disclosure is directed primarily to hitch balls, bungee cords and ratchet straps, one skilled in the art should appreciate that the concepts described herein apply to a variety of products and that it is not feasible to describe each of such products in detail. As such, it should be recognized that the concepts described herein are not limited to the illustrative examples embodied within this application, but instead apply generally to automotive-related products to the extent such products fall within the scope of the claims herein.

[Para 31] Figures 1–9 illustrate various improved bungee cord packaging. Figure 1 illustrates a ten count bungee cord packaging, with Figure 2 illustrating the packaging with bungee cords attached. Figure 3 illustrates a fifteen-count bungee cord packaging with Figure 4 illustrating the packaging with bungee cords attached. Figures 5–7 illustrate a different embodiment of a ten-count bungee cord packaging, while Figures 8–9 illustrate a different embodiment of a fifteen-count bungee cord packaging. It should be appreciated that the number of bungee cords that the bungee packaging is designed to hold can be varied and the scope of this application is meant to cover bungee cord packaging for various numbers of bungee cords.

[Para 32] The bungee cord packaging 10 of Figures 1–4 includes a generally planar body 15, generally comprised of plastic or other suitable material, which may include a cut-out section 18. The bungee cord packaging 10 includes a set of scallops 20 located along the bottom of the body 15, a series of apertures 25, a series of hooked edges 28 and a handle 30. Bungee cords 31, which generally include two hooked ends 32, can be attached to the packaging 10 by hooking each of the hooked ends 32 to one of scallops 20, hooked edges 28 or handle 30. For example, a bungee cord 31 can be hooked at one end by attaching one hooked end to a portion of an aperture 25 and attaching the other hooked end to one of the scallops 20. In other

embodiments, such as those shown in Figures 2 and 4, both hooked ends 32 are attached to the scallops 20 and the cord 31 is draped through either one of the apertures 25 or hooked edges 28. In some embodiments, the apertures 25 have a one or more low spots 33. For example, in the embodiment shown in Figure 1, there are two such apertures, a circular aperture 25a and an elongated aperture 25b. The circular aperture 25a has a single low spot 33 at the bottom of the circular aperture 25a. The elongated aperture 25b includes two low spots 33 at either end of the elongated aperture 25b, as shown in Figure 1, or across the bottom 39 injection molded tabs 118 that would allow for hanging of the packaging 100 during display or storage of the elongated aperture 25b, as shown in Figure 3. These low spots 33 assist in maintaining the bungee cords in a generally parallel relationship to each other and keep the bungee cords 31 from overlapping one another. In some embodiments, the hooked edges 28 include tabs 35 that provide low spots 33 on the edge and keep the bungee cords 31 properly aligned. Furthermore, in some embodiments the handle 30 includes low spots 33 for attaching or draping bungee cords 31. The handle 30 may also include a tab portion 37 for hanging the packaging 10.

[Para 33] In the embodiments shown in Figures 5–9, the body 40 is non-planar. As shown, the body 40 is formed from two opposing arced surfaces, and upper arced surface 42 and a lower arced surface 44. The arced surfaces 42, 44 provide rigidity to the body 40. For larger packages 10, such as that shown in Figure 8, a rib 46 may intersect the cutout portion and connects the two arced surfaces. Furthermore, the packaging 10 may include means for allowing the packaging to free-stand. As an illustrative example, extended members 48 may be added along the scallops 20 that will allow the packaging to stand as it basically forms a tripod with ends 49 and extended members 48 forming the contact points of the tripod. Although not shown in the Figures, ends 49 may include more pronounced horizontal portions that assist in providing contact with a flat surface and further provide additional axial distance from the extended members 48. The packaging may include other means or mechanisms for allowing the packaging to free stand. The arced

surfaces further allow multiple packages 10 to nest in with one another, making them easier to transport and store.

[Para 34] In some embodiments holes are placed along the body 15 of the packaging so that cable ties, wire or other comparable mechanisms can be passed through the body of the packaging and further secure the bungee cords 31. In other embodiments, clips, such as, for example, molded in clips are placed along the surface of the body 15 to further secure the bungee cords.

[Para 35] In some embodiments, labels are placed along the surface of the packaging body 15 that indicate what size bungee cord 31 should be secured in a particular position on the packaging 10. The labels can be any form, such as, for example, markings, stickers, or molded markers. Furthermore, the labels can provide information in the form of numbers, colors or diagrams. In some other embodiments, surfaces of the body 15 have display regions, such as recessed regions for stick on labels that provide information regarding the packaging 10 or bungee cords 31 thereon.

[Para 36] Figures 10–13 illustrate various improved hitch ball packaging. Figure 10 illustrates a single hitch ball packaging. Figure 11 illustrates a hitch ball and lock assembly packaging. Figures 12 and 13 illustrate multi-hitch ball packaging. It should be appreciated that Figures 10–13 merely illustrate examples of hitch ball packaging and that modifications to such designs are feasible depending on the construction and configuration of the hitch ball product. It should also be appreciated that these packages can be extended to other related products, such as, for example, adjustable hitch balls.

[Para 37] Figure 10 illustrates a single hitch ball packaging, generally referenced as 100. The packaging 100 includes two side walls 102, a back wall 104, a top wall 105 and a partial front wall 106. The walls 102, 104, 105 and 106 are preferably a hard plastic or other material that will provide durability and rigidity. The side walls 102 are generally radiussed towards each other to provide a dome-shaped top portion 108 of the single hitch ball packaging 100. A center cavity 110 is formed between each of the walls and is

designed for placement of a hitch ball. A center plate 112 is provided upon which a hitch ball can be secured. The center plate 112 is generally perpendicular to and intersects the back wall 104 and the partial front wall 106. An aperture 114 is placed in the center plate 112 for receiving a hitch ball. A hitch ball, having a ball portion and a threaded portion, is secured in the packaging 100 by placement of the threaded member through the aperture 114. The hitch ball can then be secured in place by tightening a nut or other member onto the threaded portion of the hitch ball such that it traps the center plate 112 between the ball portion of the hitch ball and the nut. The nut can then be accessed either from the bottom of the packaging or from an aperture in the back wall 104 of the packaging 100. Front and side walls 106, 102 may include display regions 116, shown as recessed areas in Figures 10 and 11. These display regions 116 can include information about the product and may include product labels. The packaging 100 may optionally include injection molded tabs 118 that would allow for hanging of the packaging 100 during display or storage. It should be appreciated that the hitch ball can be sold in the packaging 100 and that once a product has been purchased, stored in the packaging when the hitch ball is not in use.

[Para 38] Figure 11 illustrates a hitch ball and lock assembly packaging 120. In general, the construction is similar, and similar components have been referenced using the same numbers as used in packaging 100. Packaging 120 includes apertures 121 on either side of aperture 114 through which components of the lock assembly can be inserted. In addition, slot 122 may be included in the front wall 106 wherein a consumer can view the bottom or threaded portion of the hitch ball and the nut attached thereto.

[Para 39] Figures 12 and 13 illustrate multi-hitch ball packaging 130, two and three respectively. It should be appreciated that the invention may apply to packaging that can accommodate any number of hitch balls. It should be appreciated that the packaging 130 may accommodate similar hitch balls, or different size or configuration hitch balls. Additionally, multi-hitch ball packaging may take the same general shape as that shown in Figures 10 and 11, with additional apertures for additional hitch balls, or may take the form as

shown in the Figures 12 and 13. As shown in Figures 12 and 13, the packaging 130 includes a base region 132 and an extended region 134 which includes side supports 135. The base region 132 includes four side walls 136 and a top surface 138 including a series of apertures 140, the number of which corresponds to the number of hitch balls meant to be stored or packaged in the packaging 130. The extended portion 134 is generally centered about the center of the apertures 140 in the top surface 138 of the base portion 132. The extended portion 134 further includes a series of cutout sections 142, the number of which corresponds to the number of hitch balls meant to be stored or packaged in the packaging 130. The cutout sections 142 generally are configured to match the overall shape of the hitch balls placed in the packaging 130. As shown in Figures 12 and 13, the configuration of the cutout section 142 may be different or substantially the same. The extended portion may further include one or more injection molded tabs 144 that would allow for hanging of the packaging 130 during display or storage.

[Para 40] Figures 14–24 illustrate various ratchet strap packaging 200. Figures 14–16 and 17–19 illustrate two different four cord packages; Figure 20 illustrates a package for a large ratchet strap, such as a 27 foot strap; and Figures 21–22 and 23–24 illustrate a two and a four cord package, respectively, with fold-out windows.

[Para 41] Figures 14–16 illustrate a first embodiment of a ratchet strap packaging 200. In this embodiment, the packaging includes compartments 210 for each ratchet strap. Each compartment 210 includes a base portion 215 and a top portion 217 which are secured against a backing wall 220. The compartments 210 generally include divider walls 222 that maintain each ratchet strap separate. Both the top portion 217 and the bottom portion 215 generally snap connect to the backing wall 220 at connection points 225. In some embodiments, the base portion 215, or top portion 217, include a viewing window 230 to provide viewing access to the portion of the ratchet strap covered by the base portion 215. In some embodiments hooks 333 are used to against in securing the ratchet strap. In other embodiments, tabs 335

are placed in the top of the backing wall 220 for hanging of the packaging 200.

[Para 42] Figures 17–19 illustrate another embodiment, similar to that shown in Figures 14–16. As a principle difference, the top portion 217 and bottom portion 215 are combined into a single piece connected by side walls 240. The top portion and bottom portion can be secured to a backing wall similarly to that shown in Figures 14–16, namely using snap together connections, or can be secured with ties that pass through holes 238. In other embodiments, a backing wall is not used, but instead ties are used to secure the ratchet strap in the packaging 200.

[Para 43] Figure 20 is similar to that shown in Figures 14–16, except that it is configured to store or display a single large ratchet strap. A compartment 250 is used to coil the strap, while compartment 255 is used to secure the ratchet.

[Para 44] Figures 21–22 and 23–24 only differ in the number of ratchet straps they are designed to hold, two and four respectively. Compartments 220 are formed between a back wall 260, side walls 262, top wall 264, bottom wall 266 and divider walls 268. A covering 270 is then hingedly attached to a top and bottom walls 264, 266 and preferably have an open space 275 between them.

[Para 45] The invention has been described with reference to the preferred embodiment. Clearly, modifications and alterations will occur to others upon a reading and understanding of this specification. It is intended to include all such modifications and alterations insofar as they come within the scope of the appended claims or the equivalents thereof.